

B2 --As shown in, for example, FIGS. 1-3, a plurality of the woven in joints 16 define closed parameter joints and form a closed edge or end between the top and bottom layers of fabric.—

IN THE CLAIMS

Please cancel claim 33 and amend claims 1, 10, 11, 16-23, 30, 32, 34-40 as shown in the attached set of all claims of the present application. The attached set identifies the status of all claims (original, cancelled, previously amended, and currently amended).

REMARKS

The Office Action includes objections to the Specification that the foregoing amendments address. In particular, the Office Action states that the Specification fails to provide proper antecedent basis for the statements that “the flow barriers form peninsulas” (claims 17, 18, 35, 36); “the flow barriers are T-shaped” (claim 21); “the woven in joints form an inflatable portion having more than four sides” (claims 32 and 40); and “the woven in joints form an inflatable portion having at least six sides” (claim 33); the description of Fig. 3A; and the new paragraph previously added to page 11, line 13; and miscellaneous informalities in claims 21, 34, 35, 36, 37, and 39. The foregoing amendments address each of these objections. The Attorney for Applicant appreciates Examiner’s thoroughness in identifying these informalities so that they may be corrected.

Claims 11, 12, 16-31, 36 and 38 were rejected under 35 USC §112, second paragraph, as being indefinite. Several phrases are deemed to lack antecedent basis in the claims. In particular, the phrases “said internal flow barriers” (claims 11, 16, 17- 21 and 22); “at least a portion of said flow barriers” (claim 23); “an area of two layers of fabric”

(claim 30); "said woven in joints forming said peninsula" (claim 36); "said islands" (claim 38) are identified in the office action as being of concern. These rejections have been addressed by the present amendments to the claims. Applicant's Attorney appreciates Examiner's many suggestions for removing indefiniteness from these claims.

Claims 1-4, 6-13, 15-26, and 28-40 were rejected under 35 USC §103(a) as unpatentable over Haland et al. in view of Buchner et al. and Thornton et al. Applicant has amended claims 1, 23, 32, and 40 to include the limitation wherein at least one of said flow barriers comprises at least one of a box structure, an extended box configuration, an island, a stepped corner profile, and a cross shape and claim 10 to include the limitation wherein said at least one internal flow barrier comprises at least one of a box structure, an extended box configuration, an island, a stepped corner profile, and a cross shape. In view of this amendment, Applicant believes the rejection of these claims is overcome.

Haland et al. may state that "selected parts of the first region and the second region being interwoven to define points or lines where the front part and back part of the inflatable element are secured together," however, Haland et al. does not enable any mode of interweaving, is jacquard woven, and fails to disclose how the front and back parts are secured together. Furthermore, the teachings of Buchner et al. and Thornton et al. supply different patterns for a woven in "joint." However, both illustrate and describe a joint where one side of the joint is a single layer and the other side is a double layer rather than a joint where both sides are double layers. For example, see Figs. 3 and 4 of Thornton et al. and Fig. 4 of Buchner et al. The former shows the two layer zone 12 keying off a single weft yarn at the end of zone 14. Buchner et al. teaches the same pattern. Neither teaches a four yarn repeat pattern of the type disclosed by Applicant.

Moreover, it would not be obvious from the combination of Haland et al., Thornton et al. and Buchner et al. to alter the patterns taught by two of these references to that of the Applicant's pattern. Further, the proposed combination of references is not taught by the references themselves and appears to be based on improper hindsight.

Claims 5, 14, and 27 were rejected under 35 USC §103(a) as unpatentable over Haland et al., in view of Buchner et al., Thornton et al., and further in view of Kitamura. The rejection is traversed in view of the amendments to the claims and the comments above with regard to Haland et al., Buchner et al., and Thornton et al., which apply here as well. Kitamura does not teach or suggest the weave pattern of the present invention either by itself or in combination with Haland et al., Buchner et al., or Thornton et al. Further, the proposed combination of references is not taught by the references themselves and appears to be based on improper hindsight. Therefore, the present invention as claimed is not obvious in view of the cited references.

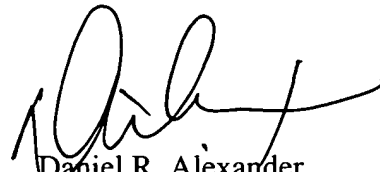
In view of the foregoing amendments and remarks, Applicant believes that the present application is in condition for allowance. An early and favorable action to that respect is earnestly solicited.

Should any matter of form or language stand in the way of allowance of the present application, the undersigned respectfully requests a telephone conference to resolve such issues.

The Commissioner is hereby authorized to charge any fees as may be required for timely acceptance of the Amendment transmitted herewith and/or to credit any surplus to Deposit Account No. 04-0500. A duplicate copy of this sheet is enclosed.

Respectfully requested,

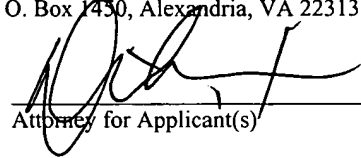
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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on October 6, 2003, along with a postcard receipt.



Attorney for Applicant(s)

CLAIMS OF 09/884,541 FOLLOWING AMENDMENT
ACCOMPANYING REQUEST FOR CONTINUING EXAMINATION

1. (Currently Amended) An inflatable airbag cushion comprising: a woven bag of non-jacquard construction, wherein said bag comprises a face portion and a rear portion formed from a first fabric layer and a second fabric layer, each of said first and second fabric layers being defined by a plurality of polymeric warp yarns running in a warp direction interposed by a plurality of polymeric weft yarns running in a weft direction substantially transverse to said warp direction; said bag further comprising a plurality of woven in joints, said woven in joints being arranged so as to define flow barriers between said face portion and said rear portion such that upon introduction of a gas into said bag, the flow of the gas within the bag is limited by said woven in joints thereby containing the gas in locations where inflation is desired and restricting inflation of said bag at locations where said woven in joints are present; at least a portion of at least one of said woven in joints extending in both the warp direction and the weft direction between said face portion and said rear portion, and all of said woven in joints consisting essentially of one or more straight line segments, at least one of said woven-in joints forming at least one of a closed edge and end between said face portion and said rear portion to prevent gas from escaping from said airbag cushion upon the introduction of gas into said cushion, and wherein at least one of said flow barriers comprise substantially parallel woven in joints separated from one another by at least two yarns and no more than twelve yarns in each layer of fabric, wherein at least one of said flow barriers comprises at least

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one of a box structure, an extended box configuration, an island, a stepped corner profile, and a cross shape.

2. (Previously Amended) The invention according to Claim 1, wherein at least one of said flow barriers comprise box structures disposed across the interior of said bag.

3. (Previously Amended) The invention according to Claim 2, wherein said box structures are of multiple cornered construction.

4. (Original) The invention according to Claim 1, wherein said warp yarns and said weft yarns are formed from a polymer selected from the group consisting of polyester, Nylon 6 and Nylon 6.6.

5. (Original) The invention according to Claim 1, wherein said bag further comprises a porosity blocking coating.

6. (Original) An invention according to Claim 1, wherein said parallel woven in joints are separated from one another by no more than eight yarns in each layer of fabric.

7. (Original) The invention according to Claim 1, wherein said parallel woven in joints are separated from one another by no more than four yarns in each layer of fabric.

8. (Previously Amended) The invention according to Claim 1, wherein the woven-in joints are separated by an area of said first and second layers of fabric.

9. (Previously Amended) The invention according to Claim 1, wherein the airbag cushion is in the shape of a rectangle.

10. (Currently Amended) An inflatable airbag cushion comprising: a woven bag of non-jacquard construction, wherein said bag comprises a face portion and a rear portion formed from a first fabric layer and a second fabric layer, each of said first and second fabric layers being defined by a plurality of polymeric warp yarns running in a warp direction interposed by a plurality of polymeric weft yarns running in a weft direction substantially transverse to said warp direction; said bag further comprising a plurality of woven in joints, said woven in joints being arranged so as to define flow barriers between said face portion and said rear portion such that upon introduction of a gas into said bag, the flow of the gas within the bag is limited by said woven in joints thereby containing the gas in locations where inflation is desired and restricting inflation of said bag at locations where said woven in joints are present, at least one of said woven in joints

12. defining an interior flow barrier, a plurality of said woven in joints defining closed perimeter joints, said bag having at least one inlet opening along the perimeter thereof, all of said woven in joints consisting essentially of one or more straight line segments,

15. wherein ^{AS} ~~said at least one~~ ^{interior} ~~internal flow barrier~~ comprises at least one of a box structure, an extended box configuration, an island, a stepped corner profile, and a cross shape. *see ds. 11, 16-22*

11. (Currently Amended) The invention according to Claim 10, wherein ~~said internal flow barriers comprise~~ said at least one ^{interior} internal flow barrier comprises box structures disposed across the interior of said bag.

12. (Previously Added) The invention according to Claim ~~10~~¹¹, wherein ~~said box structures~~^{Ag} are of multiple cornered construction.

13. (Previously Added) The invention according to Claim 10, wherein said warp yarns and said weft yarns are formed from a polymer selected from the group consisting of polyester, Nylon 6 and Nylon 6.6.

14. (Previously Added) The invention according to Claim 10, wherein said bag further comprises a porosity blocking coating.

15. (Previously Added) The invention according to Claim 10, wherein the airbag cushion is in the shape of a rectangle.

16. (Currently Amended) The invention according to Claim 10, wherein ~~at least one of said internal flow barriers~~ said at least one internal flow barrier extends in both the warp direction and weft direction.

17. (Currently Amended) The invention according to Claim 10, wherein ~~at least one of said internal flow barriers~~ said at least one internal flow barrier forms a peninsula an

extended box configuration which projects from an edge of said bag into the interior thereof.

18. (Currently Amended) The invention according to Claim 10, wherein ~~a plurality of said internal flow barriers form peninsulas~~ said at least one internal flow barrier comprises a plurality of extended box configurations each of which project from an edge of said bag into the interior thereof.

19. (Currently Amended) The invention according to Claim 10, wherein ~~at least one of said internal flow barriers~~ said at least one internal flow barrier forms an island in the interior of said bag not connected to an edge of said bag.

20. (Currently Amended) The invention of Claim 10, wherein ~~a plurality of said internal flow barriers form respective~~ said at least one internal flow barrier comprises a plurality of islands in the interior of said bag not connected to an edge of said bag.

21. (Currently Amended) The invention of Claim 10, wherein ~~at least one of said internal flow barriers is in the shape of a T~~ said at least one internal flow barrier has a stepped corner profile so as to have two or more corners so as to distribute the stress of inflation more uniformly.

22. (Currently Amended) The invention of Claim 10, wherein ~~at least one of said internal flow barriers~~ said at least one internal flow barrier is in the shape of a cross.

23. (Currently Amended) An inflatable airbag cushion comprising: a woven bag of non-jacquard construction, wherein said bag comprises a face portion and a rear portion formed from a first fabric layer and a second fabric layer, each of said first and second fabric layers being defined by a plurality of polymeric warp yarns running in a warp direction interposed by a plurality of polymeric weft yarns running in a weft direction substantially transverse to said warp direction; said bag further comprising a plurality of woven in joints, said woven in joints being arranged so as to define flow barriers between said face portion and said rear portion such that upon introduction of a gas into said bag, the flow of the gas within the bag is limited by said woven in joints thereby containing the gas in locations where inflation is desired and restricting inflation of said bag at locations where said woven in joints are present, at least one of said woven in joints consisting essentially of one or more straight segments, and wherein at least ~~a portion one~~ of said flow barriers ~~comprise~~ comprises substantially parallel woven in joints separated from one another by at least two yarns and no more than twelve yarns in each layer of fabric, wherein at least one of said flow barriers comprises at least one of a box structure, an extended box configuration, an island, a stepped corner profile, and a cross shape.

24. (Previously Added) The invention according to Claim 23, wherein said flow barriers comprise box structures disposed across the interior of said bag.

25. (Previously Added) The invention according to Claim ²⁴~~23~~, wherein ^{AD}(said box structures) are of multiple cornered construction.

26. (Previously Added) The invention according to Claim 23, wherein said warp yarns and said weft yarns are formed from a polyester selected from the group consisting of polyester, Nylon 6 and Nylon 6.6.

27. (Previously Added) The invention according to Claim 23, wherein said bag further comprises a porosity blocking coating.

28. (Previously Added) The invention according to Claim 23, wherein said parallel woven in joints are separated from one another by no more than eight yarns in each layer of fabric.

29. (Previously Added) The invention according to Claim 23, wherein said parallel woven in joints are separated from one another by nor more than four yarns in each layer of fabric.

30. (Currently Amended) The invention according to Claim 23, wherein the woven-in joints are separated by an area of ~~two~~ said first and second layers of fabric.


31. (Previously Added) The invention according to Claim 23, wherein the airbag cushion is in the shape of a rectangle.

32. (Currently Amended) An inflatable airbag cushion comprising: a woven bag of non-jacquard construction, wherein said bag comprises a face portion and a rear portion

formed from a first fabric layer and a second fabric layer, each of said first and second fabric layers being defined by a plurality of polymeric warp yarns running in a warp direction interposed by a plurality of polymeric weft yarns running in a weft direction substantially transverse to said warp direction; said bag further comprising a plurality of woven in joints, said woven in joints being arranged so as to define flow barriers between said face portion and said rear portion such that upon introduction of a gas into said bag, the flow of the gas within the bag is limited by said woven in joints thereby containing the gas in locations where inflation is desired and restricting inflation of said bag at locations where said woven in joints are present, all of said woven in joints consisting essentially of one or more straight line segments, at least some of said woven-in joints forming closed edges between said face portion and said rear portion to prevent gas from escaping from said airbag cushion upon the introduction of gas into said cushion, and wherein said woven in joints form (an inflatable portion having more than four interior sides,) *no basis* and wherein at least one of said flow barriers comprises at least one of a box structure, an extended box configuration, an island, a stepped corner profile, and a cross shape.

33. (Presently Cancelled) The invention according to Claim 32, wherein said inflation portion has at least six interior sides.

34. (Currently Amended) An inflatable airbag cushion comprising: a woven bag of non-jacquard construction, wherein said bag comprises a face portion and a rear portion formed from a first fabric layer and a second fabric layer, each of said first and second




fabric layers being defined by a plurality of polymeric warp yarns running in a warp direction interposed by a plurality of polymeric weft yarns running in a weft direction substantially transverse to said warp direction; said bag further comprising a plurality of woven in joints, said woven in joints being arranged so as to define flow barriers between said face portion and said rear portion such that upon introduction of a gas into said bag, the flow of the gas within the bag is limited by said woven in joints thereby containing the gas in locations where inflation is desired and restricting inflation of said bag at locations where said woven in joints are present, all of said woven in joints consisting essentially of one or more straight line segments, and at least one of said ~~woven-in~~ woven in joints forming a peninsula an extended box configuration which projects from a side of the bag into the interior thereof.

35. (Currently Amended) The invention according to Claim 34, wherein at least two of said ~~woven-in~~ woven in joints form [peninsulas] extended box configurations.

36. (Currently Amended) The invention according to Claim 34, wherein ~~at least a portion of said woven-in joints forming said peninsula comprises~~ said extended box configurations ^{AB} has substantially parallel woven-in joints.

37. (Currently Amended) An inflatable airbag cushion comprising: a woven bag of non-jacquard construction, wherein said bag comprises a face portion and a rear portion formed from a first fabric layer and a second fabric layer, each of said first and second



fabric layers being defined by a plurality of polymeric warp yarns running in a warp direction interposed by a plurality of polymeric weft yarns running in a weft direction substantially transverse to said warp direction; said bag further comprising a plurality of woven in joints, said woven in joints being arranged so as to define flow barriers between said face portion and said rear portion such that upon introduction of a gas into said bag, the flow of the gas within the bag is limited by said woven in joints thereby containing the gas in locations where inflation is desired and restricting inflation of said bag at locations where said woven in joints are present, all of said woven in joints consisting essentially of one or more straight line segments, and at least one of said ~~woven in~~ woven in joints forming an island not connected to a side of the bag.

38. (Previously Added) The invention according to Claim 37, wherein ~~said bag has a plurality of said islands~~ a plurality of said woven in joints form an island not connected to a side of the bag.

39. (Currently Amended) The invention according to Claim 37, wherein said island is formed of substantially parallel ~~woven in~~ woven in joints.

40. (Currently Amended) An inflatable airbag cushion comprising: a woven bag of non-jacquard construction, wherein said bag comprises a face portion and a rear portion formed from a first fabric layer and a second fabric layer, each of said first and second fabric layers being defined by a plurality of polymeric warp yarns running in a warp direction interposed by a plurality of polymeric weft yarns running in a weft direction

substantially transverse to said warp direction; said bag further comprising a plurality of woven in joints, said woven in joints being arranged so as to define flow barriers between said face portion and said rear portion such that upon introduction of a gas into said bag, the flow of the gas within the bag is limited by said woven in joints thereby containing the gas in locations where inflation is desired and restricting inflation of said bag at locations where said woven in joints are present, all of said woven in joints consisting essentially of one or more straight line segments, and wherein said woven in joints form

- 13 (an inflatable portion having more than four interior sides) wherein at least one of said flow barriers comprises at least one of a box structure, an extended box configuration, an island, a stepped corner profile, and a cross shape.
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